

CLAIMS

1. A method of arranging transmission of packet data in a system comprising a mobile terminal, a wireless local network and a mobile network, the method comprising:

arranging data transmission between the mobile terminal and the wireless local network,

signalling end-to-end service related parameters via a separate signalling element,

receiving a resource authorization identifier in the mobile terminal from the signalling element,

transmitting the resource authorization identifier to the mobile network via the local network,

requesting authorization from the signalling element by the mobile network on the basis of the resource authorization identifier, and

binding a tunnel between the mobile terminal and the mobile network to an end-to-end data flow of the mobile terminal on the basis of an authorization response received from the signalling element and comprising identification information on the end-to-end data flow and tunnel identification information identifying the tunnel.

2. A method as claimed in claim 1, wherein at least one filter or gate parameter is transmitted from the signalling element to the mobile network,

the received at least one filter or gate parameter is associated with the tunnel, and

filtering or gating is arranged in the mobile network to/from the tunnel based on the association.

3. A method as claimed in claim 1, wherein the same tunnel between the mobile network and a network element of the mobile network and

utilizing the data transmission resources of the local network is used for signalling purposes and for user data transmission.

4. A method as claimed in claim 1, wherein a first tunnel between the mobile terminal and a first network element of the mobile network is established for end-to-end service parameter signalling, and a second tunnel between the mobile terminal and a second network element of the mobile network is established for user data transmission after the reception of (resource authorization) identifier.

5. A method as claimed in claim 1, wherein the tunnel between the mobile terminal and the mobile network is an IPSec tunnel, whereby the tunnel is established by utilizing an IKE (Internet Key Exchange) protocol.

6. A method as claimed in claim 1, wherein the mobile network is a 3GPP network offering a packet-switched service comprising at least one network element supporting access via a WLAN (Wireless Local Area Network).

7. A method as claimed in claim 5, wherein an association is arranged between the tunnel and a 3GPP-WLAN interworking system bearer.

8. A wireless system comprising a mobile terminal, a wireless local network and a mobile network, wherein the wireless local network is configured to provide data transmission for the mobile terminal, the mobile terminal is configured to receive a resource authorization identifier from a separate signalling element during the negotiation of end-to-end service related parameters,

the mobile terminal is configured to transmit the resource authorization identifier to the mobile network via the local network,

the mobile network is configured to request authorization from the signalling element on the basis of the resource authorization identifier,

the mobile network is configured to bind a tunnel between the mobile terminal and the mobile network to an end-to-end data flow of the mobile terminal on the basis of an authorization response received from the signalling element and comprising identification information on the end-to-end

data flow and tunnel identification information identifying the tunnel.

9. A network element for a mobile network connectable to a wireless local network providing data transmission for a mobile terminal, wherein the network element is configured to establish a tunnel with a mobile terminal for transferring information with the mobile terminal accessing the mobile network via the wireless local network,

the network element is configured to receive a resource authorization identifier from the mobile terminal,

the network element is configured to request authorization from a signalling element on the basis of the resource authorization identifier,

the network element is configured to bind a tunnel between the mobile terminal and the mobile network to an end-to-end data flow of the mobile terminal on the basis of an authorization response received from the signalling element and comprising identification information on the end-to-end data flow and tunnel identification information identifying the tunnel.

10. A network element according to claim 9, wherein the network element is configured to transmit at least one filter or gate parameter from the signalling element to the mobile network,

the network element is configured to associate the received at least one filter or gate parameter with the tunnel utilizing local network resources, and

the network element is configured to arrange filtering or gating in the mobile network to/from the tunnel based on the association.

11. A network element according to claim 9, wherein the network element is configured to use the same tunnel between the mobile network and a network element of the mobile network and utilizing the data transmission resources of the local network for signalling purposes and for user data transmission.

12. A network element according to claim 9, wherein the network element is configured to establish a first tunnel between the mobile terminal

and a first network element of the mobile network for the mobile terminal signalling, and a second tunnel between the mobile terminal and a second network element of the mobile network for user data transmission after the reception of a resource authorization identifier.

13. A network element according to claim 9, wherein the tunnel between the mobile terminal and the mobile network is an IPSec tunnel, whereby the tunnel is established by utilizing an IKE (Internet Key Exchange) protocol.

14. A network element according to claim 9, wherein the network element is a 3GPP network element offering a packet-switched service for a mobile terminal accessing a WLAN (Wireless Local Area Network).

15. A wireless terminal, wherein the wireless terminal is configured to connect a wireless local network,

the wireless terminal is configured to establish a tunnel with a network element of a mobile network via the wireless local network,

the wireless terminal is configured to receive a resource authorization identifier from a separate signalling element during the negotiation of end-to-end service related parameters, and

the wireless terminal is configured to transmit the resource authorization identifier to the mobile network by using the tunnel.

16. A computer program product, loadable into the memory of a network element of a mobile network connectable to a wireless local network, for controlling the network element by executing the program code included in the computer software product in a processor of the network element, the computer program product comprising:

a program code portion for controlling the network element to receive a resource authorization identifier from the mobile terminal,

a program code portion for controlling the network element to request authorization from a signalling element on the basis of the resource authorization identifier, and

a program code portion for controlling the network element to bind a tunnel between the mobile terminal and the mobile network to an end-to-end data flow of the mobile terminal on the basis of an authorization response received from the signalling element and comprising identification information on the end-to-end data flow and tunnel identification information identifying the tunnel.

17. A computer program product, loadable into the memory of a wireless terminal, for controlling the wireless terminal by executing the program code included in the computer software product in a processor of the wireless terminal, the computer program product comprising:

a program code portion for controlling the wireless terminal to receive a resource authorization identifier from a separate signalling element during the negotiation of end-to-end service related parameters, and

a program code portion for controlling the wireless terminal to transmit the resource authorization identifier to the mobile network by using the tunnel.